

## CLAIMS

1. A method for transporting real-time data over a packet-switched  
2 network and a circuit-switched network, comprising the steps of:

4 receiving an internet protocol (IP) packet from the packet-  
switched network at a designated point in the circuit-switched  
network;

6 generating a payload data packet;

8 aligning the payload data packet to a circuit-switched frame;

10 transporting the circuit-switched frame over-the-air to a wireless  
communication device;

12 extracting the payload data packet from the circuit-switched  
frame at the wireless communication device; and

generating a new IP packet from the payload data packet.

2. The method of Claim 1, wherein the step of generating the payload  
2 data packet comprises the steps of:

4 if the data in the internet protocol packet is intact, then  
compressing the internet protocol packet at the designated point to  
form a payload data packet; and

6 if the data in the internet protocol packet is corrupted, then  
generating a null frame as a payload data packet.

3. The method of Claim 2, wherein the step of compressing the IP packet  
2 comprises the step of stripping off header information.

4. The method of Claim 2, wherein if the null frame is the payload data  
2 packet, then the step of extracting the payload data packet comprises the step  
of interpolating a substitute for the null frame from at least one adjacent  
4 payload data packet.

5. The method of Claim 2, wherein if the null frame is the payload data  
2 packet, then the step of extracting the payload data packet comprises the step  
of using a last non-null frame as the payload data packet.

6. The method of Claim 3, wherein the step of generating the new IP  
2 packet from the payload data packet comprises the step of adding new header  
information to the payload data packet.

7. The method of Claim 6, wherein if the null frame is received, the step  
2 of generating the new IP packet from the payload data packet further  
comprises the steps of:

4 incrementing a radio transport protocol (RTP) sequence number if the  
null frame is received; and  
6 including the incremented RTP sequence number in the new header  
information.

8. The method of Claim 2, wherein a packet data serving node (PDSN) is  
2 the designated point, and the step of generating the payload packet is  
performed by the PDSN.

9. The method of Claim 2, wherein the step of generating the payload  
2 data packet is performed by a base station.

10. A method for transporting real-time data over a circuit-switched  
2 network and a packet-switched network, comprising the steps of:

4 receiving an internet protocol (IP) packet from an electronic  
device at a wireless communication device;

6 generating a payload data packet from the IP packet at the  
wireless communication device;

8 aligning the payload data packet to a circuit-switched frame;

transporting the circuit-switched frame over-the-air to a base  
station;

10                   extracting the payload data packet from the circuit-switched  
frame; and  
12                   generating a new IP packet from the payload data packet.

11.         The method of Claim 10, wherein the step of generating the new IP  
2         packet from the payload data packet is performed by the base station.

12.         The method of Claim 10, wherein the step of generating the new IP  
2         packet from the payload data packet is performed by a packet data serving  
node (PDSN).

13.         A wireless communication device for transporting packetized voice  
2         traffic and data traffic over a circuit-switched network and a packet-  
switched network, comprising:

4                   a processor; and  
6                   a storage element coupled to the processor comprising an  
instruction set executable by the processor, wherein the instruction set  
comprise instructions for:  
8                   generating a payload data packet from an internet  
protocol (IP) packet;  
10                  aligning the payload data packet to a circuit-switched  
frame; and  
12                  transmitting the circuit-switched frame over-the-air to a  
base station.

14.         A base station for transporting packetized voice traffic and packetized  
2         data traffic over a wireless communication network, comprising:

4                   a processor; and  
6                   a storage element coupled to the processor comprising an  
instruction set executable by the processor, wherein the instruction set  
comprise instructions for:  
receiving an internet protocol (IP) packet;

8                         compressing the IP packet to form a payload data packet;  
10                         aligning the payload data packet to a voice frame; and  
                               transmitting the aligned voice frame to a wireless  
                               communication device.

15.     The base station of Claim 14, wherein the instructions are further for  
2     generating a null frame if the received IP packet is corrupt, wherein the null  
       frame will carry the same Radio Transport Protocol (RTP) sequence number  
4     as the flawed IP packet and will be the payload data packet.

16.     A packet data serving node (PDSN) for transporting of packetized  
2     voice traffic and packetized data traffic over a wireless communication  
       network, comprising:

4                         a processor; and  
6                         a storage element couple to the processor comprising an  
       instruction set executable by the processor, wherein the instruction set  
comprise instructions for:  
8                         receiving an internet protocol (IP) packet;  
10                         compressing the IP packet to form a payload data packet;  
                               aligning the payload data packet to a voice frame; and  
                               transmitting the aligned voice frame to a base station.

17.     The PDSN of Claim 16, wherein the instructions are further for  
2     generating a null frame if the received IP packet is corrupted, wherein the null  
       frame will carry the same Radio Transport Protocol (RTP) sequence number  
4     as the flawed IP packet and will be the payload data packet.

18.     Apparatus for transporting real-time data over a packet-switched  
2     network and a circuit-switched network, comprising:

4                         means for receiving an internet protocol (IP) packet from the  
       packet-switched network at a designated point in the circuit-switched  
                               network;

6           means for generating a payload data packet;  
8           means for aligning the payload data packet to a circuit-switched  
frame;  
10          means for transporting the circuit-switched frame over-the-air to  
a wireless communication device;  
12          means for extracting the payload data packet from the circuit-  
switched frame at the wireless communication device; and  
generating a new IP packet from the payload data packet.

19. Apparatus for transporting real-time data over a circuit-switched  
2 network and a packet-switched network, comprising:  
4           means for receiving an internet protocol (IP) packet from an  
electronic device at a wireless communication device;  
6           means for generating a payload data packet from the IP packet at  
the wireless communication device;  
8           means for aligning the payload data packet to a circuit-switched  
frame;  
10          means for transporting the circuit-switched frame over-the-air to  
a base station;  
12          means for extracting the payload data packet from the circuit-  
switched frame; and  
14          means for generating a new IP packet from the payload data  
packet.